

# UNITED STATES PATENT AND TRADEMARK OFFICE



PPLICATION NO.	Fi	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/019,451	(	07/30/2002	Elvir Causevic	. KEDI 7230US	4217	
1688	7590	03/29/2005		EXAM	EXAMINER	
		., WOODRUFF & RT DRIVE SUITE 2	SZMAL, BR	SZMAL, BRIAN SCOTT		
ST. LOUIS.			.00	ART UNIT	ART UNIT PAPER NUMBER	
				3736	• • • • • • • • • • • • • • • • • • •	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

			58					
	Application No.	Applicant(s)						
	10/019,451	CAUSEVIC ET AL.						
Office Action Summary	Examiner	Art Unit						
	Brian Szmal	3736						
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with	h the correspondence address	\$ <del></del>					
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a recommendation of the period for reply is specified above, the maximum statutory perions failure to reply within the set or extended period for reply will, by state than three months after the mail term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a repeply within the statutory minimum of thirty will apply and will expire SIX (6) MONT ute, cause the application to become ABA	ply be timely filed (30) days will be considered timely. HS from the mailing date of this commun	ication.					
Status								
1) Responsive to communication(s) filed on 18	January 2005.							
·—	nis action is non-final.							
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.D.	11, 453 O.G. 213.						
Disposition of Claims								
4)⊠ Claim(s) <u>1-6 and 8-37</u> is/are pending in the a	application.							
4a) Of the above claim(s) is/are withdr	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)⊠ Claim(s) <u>11-17 and 20-36</u> is/are allowed.								
6)⊠ Claim(s) <u>1-6,8-10,18,19 and 37</u> is/are rejecte	ed.							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restriction and	l/or election requirement.							
Application Papers								
9) The specification is objected to by the Exami	ner.							
10) The drawing(s) filed on is/are: a) a	ccepted or b) cobjected to b	y the Examiner.						
Applicant may not request that any objection to the	ne drawing(s) be held in abeyand	e. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corre	ection is required if the drawing(s	s) is objected to. See 37 CFR 1.	121(d).					
11) The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-15	52.					
Priority under 35 U.S.C. § 119	,							
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the prapplication from the International Bure * See the attached detailed Office action for a li	ents have been received. ents have been received in Apriority documents have been reau (PCT Rule 17.2(a)).	oplication No received in this National Stag	je					
Attachment(s)								
1) Notice of References Cited (PTO-892)		ummary (PTO-413)						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0</li> </ul>	. 🗖	)/Mail Date formal Patent Application (PTO-152)	)					
Paper No(s)/Mail Date	6) Other:	• •						

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## Claim Objections

1. Claim 18 is objected to because of the following informalities: In line 9, "at least partial" should read as "at least partially" to be grammatically correct. Appropriate correction is required.

2. Claim 37 is objected to because of the following informalities: In line 3, "a test subject" should read as "the test subject" due to the prior disclosure of "a test subject" in Claim 1. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 10, 18, 19 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Dolphin (5,601,091).

Dolphin discloses an audiometric apparatus and screening method and further discloses a portable hand-held enclosure; a signal processor housed by the enclosure, the processor having a computer program operated on command by the user, the program producing an auditory brainstem response test an at least one additional auditory test selected from the group of otoacoustic auditory emission test, tympanometry and otoreflectance; a display mounted to the enclosure, operatively connected to the signal processor, the display displaying the results of the selected test;

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a probe connection point on the enclosure, the probe connection point being operatively connected to the signal processor; a power supply for operating the signal processor; a plurality of electrodes for collecting data from a patient, the electrodes being operatively connected to the signal processor; a tympanometry interface operatively connected to the signal processor for recording middle ear pressure on a test subject and adjusting minor middle ear conditions during otoacoustic auditory emission and auditory brainstem response testing; an otoacoustic emission interface for otoreflectance measurements of a middle ear condition; the power supply is rechargeable; a memory module within the enclosure operatively connected to the signal processor; a computer program at least partially contained in the signal processor; a keyboard for accessing the computer program; and an otoacoustic auditory emission interface operatively connected to the signal processor for recording or assessing hearing conditions of the test subject. See Column 4, lines 9-11 and 53-67; Column 5, lines 1-7, 22-32 and 45-56; Column 6, lines 17-35, 43-66; and Column 8, lines 8-10.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dolphin (5,601,091) as applied to claim 1 above, and further in view of Combs et al (5,868,682).

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Dolphin, as discussed above, disclose and audiometric screening means, but fails to disclose an otoacoustic auditory emission simulator interface operatively connected to the signal processor for testing the integrity of the otoacoustic auditory emission interface.

Combs et al disclose a means for generating and measuring the acoustic reflectance curve of an ear and further disclose an otoacoustic auditory emission simulator interface operatively connected to the signal processor for testing the integrity of the otoacoustic auditory emission interface. See Column 18, lines 66-67; and Column 19, lines 1-2. Since both Dolphin and Combs et al disclose means for testing an ear, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means of Dolphin to include the use of a calibration means to test the integrity of the interface, as per the teachings of Combs et al, since it would provide a means of maintaining and acquiring an accurate measurement from the user's ear.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dolphin (5,601,091) as applied to claim 1 above, and further in view of Shennib (5,197,332). Dolphin, as discussed above, disclose and audiometric screening means, but fails to disclose an infrared interface operatively connected to the signal processor for permitting communication between the signal processor and an external device. Shennib discloses a headset hearing tester and further discloses an infrared interface operatively connected to the signal processor for permitting communication between the signal processor and an external device. See Column 5, lines 31-33.

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Since both Dolphin and Shennib disclose means for testing a user's hearing, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Dolphin to include the use of an infrared interface, as per the teachings of Shennib, since it is well known in the art to utilize an infrared interface to provide a wireless means of communication between the device and signal processor.

8. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolphin (5,601,091) as applied to claim 1 above, and further in view of Zurek et al (5,267,571).

Dolphin, as discussed above, disclose the use of an audiometric testing device using a keyboard, but fail to disclose a memory mapped input/output device operatively connected to the memory module and to the signal processor, the display is operatively connected to the signal processor through the memory mapped device.

Zurek et al disclose a means of testing the adequacy of human hearing and further disclose a memory mapped input/output device operatively connected to the memory module and to the signal processor, the display is operatively connected to the signal processor through the memory mapped device. See Column 4, lines 34-63; and Column 5, lines 20-62.

Since both Dolphin and Zurek et al disclose means for testing the hearing of a user, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Dolphin to include the use of a memory mapped device, as per the teachings of Zurek et al, since it is well known in the art to utilize a memory mapped system to store multiple parameters within a single memory system.

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## Allowable Subject Matter

9. The following is a statement of reasons for the indication of allowable subject matter: Claim 11 contains allowable subject matter since no prior art could be found teaching or suggesting an auditory screening device comprising, the signal processor is configured to perform a time domain sum and average over time for detecting otoacoustic auditory emission signals using an offset frame overlap method. Claims 20-23 are allowable since no prior art could be found teaching or suggesting the otoacoustic auditory emission information is recorded by frames, and information from a preceding frame s used in conjunction with information of a succeeding frame to reduce the signal to noise level in the received signals, as claimed in Claim 20. Claims 12-17 and 24-36 remain allowable per the reasons set forth in the Office Action mailed on December 10, 2004.

#### Response to Arguments

10. Applicant's arguments with respect to claims 1-6, 8-10, 18, 19 and 37 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Szmal whose telephone number is (571) 272-4733. The examiner can normally be reached on Monday-Friday, with second Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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